13. Action of Sugar upon Human Blood.—Professor Hegewisch, of Keil, states that a solution of sugar produces the same alteration in the colour of black blood as the saline solutions, namely, changing it to a bright arterial colour.—Gazette Médicale de Paris, April 12th, 1834.

## PATHOLOGY.

14. Foreign Body found in the Heart of a Boy.—The following very curious instance of this is recorded by T. Davis, Esq. of Upton upon Severn, in the second volume of the Transactions of the Provincial Medical and Surgical Association.

"On Saturday evening, January the 19th, 1833, I was summoned to attend Wm. Mills, aged ten, living at Boughton, two miles from Upton. When I arrived, his parents informed me that their son had shot himself, with a gun made out of the handle of a telescope toasting-fork. To form the breach of the gun, he had driven a plug of wood about three inches in length into the handle of the fork. The touch-hole of the gun was made after the charge of powder had been deposited in the hollow part of the handle. The consequence was, that when the gunpowder exploded, it forced the artificial breach, or piece of stick, from the barrel part of the gun with such violence that it entered the thorax of the boy, on the right side, between the third and fourth ribs, and disappeared. Immediately after the accident, the boy walked home, a distance of about forty yards.

"By the time I saw him, he had lost a considerable quantity of blood, and appeared very faint; when I turned him on his right side, a stream of venous blood issued from the orifice through which the stick entered the thorax. Several hours elapsed before any degree of reaction took place. He complained

of no pain.

"For the first ten days or a fortnight after the accident, he appeared to be recovering, and once during that time walked into his garden and back, a distance of about eighty yards; and whilst there he amused himself with his flowers, and even stirred the mould. He always said he was well, and was often cheerful, and even merry. There was no peculiar expression of countenance, excepting that his eyes were rather too bright.

"After the first fortnight he visibly emaciated, and had frequent rigors, which were always followed by faintness. The pulse was very quick. There was no cough nor spitting of blood. The secretions were healthy. He had

no pain throughout his illness.

"He died on the 25th of February, five weeks and two days after the occurrence of the accident.

"Dissection.—On opening the thorax, a small cicatrix was visible between the cartilages of the third and fouth ribs, on the right side, about half an inch from the sternum.

"The lungs appeared healthy, with the exception of a small tubercle at the right, and at its root, near to the pulmonary artery, a small blue mark in the cellular tissue, corresponding in size with the cicatrix on the parietes of the chest.

"Half an ounce of serum was contained in the pericardium.

"When an incision was made into the heart, so as to expose the right auricle and ventricle, we were astonished to find, lodged in that ventricle, the stick which the boy had used as the breach of the gun, the one end of it pressing against the extreme part of the ventricle, near the apex of the heart, and forcing itself between the columnæ carneæ and the internal surface of the heart; the other end resting upon the auriculo-ventricular valve, and tearing part of its delicate structure, and being itself encrusted with a thick coagulum as large as a walnut.

"We searched in vain for any wound, either in the heart itself or in the pericardium, by which the stick could have found its way into the ventricle."

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15. Cases illustrating the Terminations of Ovaritis Puerperalis.—The epithet puerperal, applied to this affection, is not to be considered as indicating that it occurs only after delivery. In the 4th vol. of the "Clinique des Hôpitaux," is a report of the dissection of a woman, (who never had been pregnant,) in whom the right ovary was found inflamed and much enlarged, from a purulent deposit, of a most fetid character. In another case, occurring under similar circumstances, the pus made its escape by the rectum, and the patient recovered.

In many of its features, ovaritis bears a strong resemblance to the abscess of the iliac fossa, the history of which has been so ably illustrated by Dupuytren, Dance, and others. At present, we shall confine our observations to the mere furnishing of cases, descriptive of the different modes in which ovaritis may

terminate

1. By Resolution. A woman, thirty-three years of age, was admitted into the Hôtel-Dieu on the fifteenth day after delivery. The labour had been painful, and the child extracted by turning. The symptoms were ædema of the abdominal parietes and of the inferior extremities, suppression of the lochia, a swelling in the left iliac region, painful on touch; strangury; whitish, creamy deposite in the urine, and sense of weight in the vagina. By active local bleeding, and appropriate constitutional treatment, this woman speedily recovered.

2. By Suppuration. This is a very frequent termination. The pus makes

its escape either, a, by the rectum, as in the following case.

A young woman presented a general emaciation—slight effusion into the cavity of the abdomen, enlargement of the liver, a swelling as large as a hen's egg, in the left iliac region, painful on pressure—amenorrhea—urine containing a whitish substance, which appeared like pus; well-formed pus mixed with the stools; body and neck of the uterus healthy to the touch, by which it was discovered that the tumour in the groin was connected with the womb and bladder. The patient was generally feverish, and more so towards evening. Numerous leeches were applied to the swelling, and hot fomentations afterwards. The progress of the case is not known, as she left the hospital unexpectedly. It ought, however, to be stated, that she had been delivered of a seven-month child three years before her admission, after a severe, but rapid labour. Three months after this date, she began to experience pains in the hypogastrium and groins, and these had continued with more or less severity ever since. In such cases of purulent diarrhea, the pus may make its way either into the eccum, the arches of the colon, or into the rectum. In the following case, it seems to have escaped into the left arch of the colon.

A woman was seized, on the second day after delivery, with all the symptoms of peritonitis; on recovering from which, she had an attack of phlegmasiadolens. While under treatment for this, a painful tumour made its appearance in the left groin. This attack of ovaritis was no sooner over, than she was again seized with peritonitis, in consequence of imprudently walking on a cold stone floor. On the 22d of March, (seven weeks after her admission into the hospital,) the left limb was still ædematous; and on this day was first observed purulent matter mixed with the alvine evacuations. The great relief which the patient almost instantaneously experienced in the inguinal swelling, on the occurrence of this purulent discharge, could leave no doubt but that it proceeded from the ovary, which had very probably become adherent to the sigmoid flexure of the colon. During a space of two months the discharge ceased, and returned several times; and even when the patient left the hospital, on the 23d of June following, there still remained a degree of engorgement in the left groin, and slight ædema of the limb.

b. The pus may find an exit by the bladder or vagina. MM. Husson and Dance found that this had taken place in a young girl who died of the

disease.

c. It may follow the course of the round ligament, and escape at the inguinal or crural apertures. Dupuytren has seen numerous cases of such a termination. Under these circumstances, the tumour may be mistaken for an aneurism,

as it frequently pulsates, from being in close proximity to the iliac artery. In opening abscesses at this point it is necessary to use considerable caution, as instances have been known where the artery has been inadvertently wounded.

d. It may pass into the abdominal cavity, and either become encysted, or induce fatal peritonitis: and, e, lastly, it may be discharged at snme point of the hypogastric or iliac regions, (besides the inguinal aperture,) in consequence of the ovary becoming adherent to the abdominal parietes, and the matter gradually working its way out. This termination is illustrated by the following case.

A woman, twenty-four years of age, was delivered of her sixth child on the 17th Nov. The labour was rather painful and difficult. Imprudent exposure to cold was quickly succeeded by an attack of fever, by suppression of the lochia, and a tumefaction of the right groin. When received into the hospital, the tumour was of the size of an egg, and the limb was ædematous.

In spite of repeated leechings, &c. the suppurative process commenced, and, by the end of January, several fistulous openings through the abdominal walls had taken place; and from these a copious discharge of pus flowed out. The patient gradually regained her health, and left the hospital, quite cured, a few weeks afterwards.

In the 4th vol. of the Bibliothèque Médicale is narrated in the case of a lady, in whom two iliac abscesses, supervening upon an attack of entero-peritonitis, opened, the one into the sigmoid flexure of the colon, the other into the cœcum—and this last also projected outwardly. An incision was unfortunately made into it, and a stereoral fistula was the consequence.

3. By Ramollissement. The ovary hecomes tumefied, infiltrated with a sero-purulent fluid, and either friable and easily laccrated, or extremely soft and yielding in texture. Dr. Montault saw an example of this degeneration in a young girl, who died of puerperal peritonitis. The labour had been quite natural and easy, but she had suffered much from mental anxiety, and had been exposed to cold, when she was brought to the hospital after delivery.

4. By Enlargement and Induration. A young woman was seized with metroperitonitis, five days after her discharge from the Maternité, where she had been safely delivered. She died on the sixth day of the disease, having, on the day or two preceding her dissolution, exhibited all the symptoms of ataxic fever, (from the absorption of purulent matter into the system.) On dissection, a small quantity of pus was found infiltrated into the superior and lateral portions of the uterus. The right ovary was more enlarged than the left, hardened in texture, and of a yellowish colour; firm pressure forced out only a few drops of pus. This state of induration will often continue for a long period without affecting the general health; although it must be confessed that, not unfrequently, the patient is annoyed with colicky pains, proceeding from the site of the ovary, with dysmenorrhæa and other troublesome symptoms.

When these are exceedingly obstinate, and progressively become more distressing, we may suspect that the enlarged and hardened viscus is degenerating into scirrhous, lardaceous, osseous, melanotic, or hydatidic condition.—Med. Chir. Rev. & Journ. Hebdom,

16. Fatal Case of Effusion of Blood into the Pericardium. By Dr. Carson, of Liverpool.—Mr. W., a gentleman about fifty-two years of age, of a tall and robust form, clear complexion, subject occasionally to dyspeptic affections; though of very regular and temperate habits; of an active disposition, though his occupation was sedentary and confining; had been for twelve months affected with considerable anxiety of mind, in consequence of the doubtful issue of some building speculations. Towards the end of Lent, which he had rigidly observed according to the injunctions of the Catholic Church, on the 11th of March, a day exempted from the prohibitions respecting diet, he had caten freely of beef-steaks with onion sauce. He was at that meal sparing as usual in the use of wine. On the evening of the following day, he was engaged in a fatiguing and rather anxious way with the business of a club, of which he was treasurer.